

MILITARY SPECIFICATION SHEET

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES:
RECEPTACLE, SOCKET CONTACTS, STRAIGHT-THRU,
FOR MULTILAYERED PRINTED WIRING BOARDS, (.100 SPACING)

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the connectors described herein shall consist of this document and the latest issue of Specification MIL-C-55302.

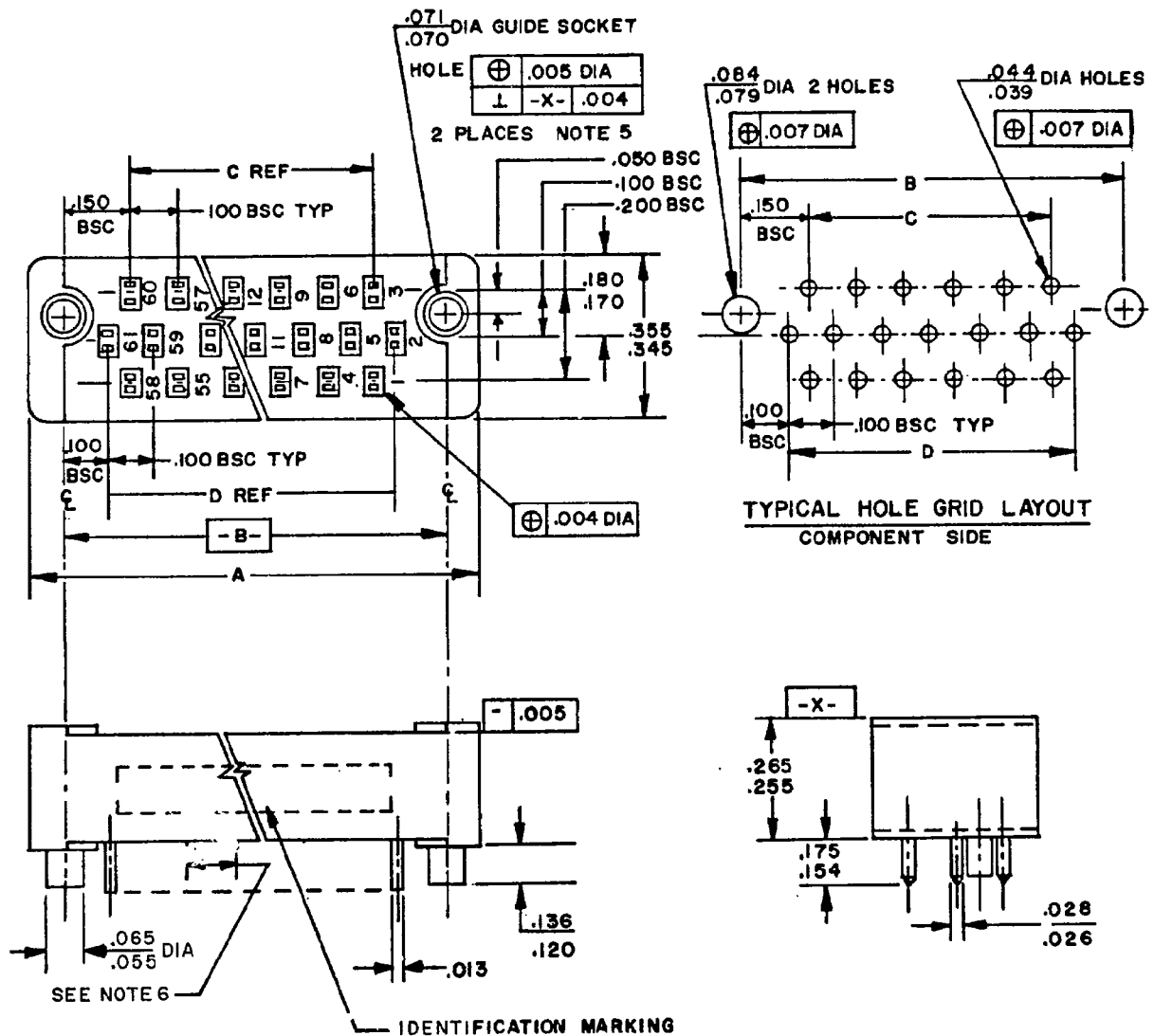


FIGURE 1. Connector, receptacle (.100 spacing).

FSC 5935

Ⓐ denotes changes

TABLE I. Dimensions and dash number.

Dash No.	No. of contacts	A	B Basic	C Ref	D Ref
01	13	.800 \pm .005	.600	.300	.400
02	25	1.200 \pm .005	1.000	.700	.800
03	37	1.600 \pm .005	1.400	1.100	1.200
04	49	2.000 \pm .008	1.800	1.500	1.600
05	61	2.400 \pm .008	2.200	1.900	2.000

INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM
.004	.10	.050	1.27	.136	3.45	.300	7.62	1.200	30.48
.005	.13	.055	1.40	.150	3.81	.345	8.76	1.400	35.56
.007	.18	.065	1.65	.154	3.91	.355	9.02	1.500	38.10
.008	.20	.070	1.78	.170	4.32	.400	10.16	1.600	40.64
.013	.33	.071	1.80	.175	4.45	.600	15.24	1.800	45.72
.026	.66	.079	2.01	.180	4.57	.700	17.78	1.900	48.26
.028	.71	.084	2.13	.200	5.08	.800	20.32	2.000	50.80
.039	.99	.100	2.54	.255	6.48	1.000	25.40	2.200	55.88
.044	1.12	.120	3.05	.265	6.73	1.100	27.94	2.400	60.96

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are \pm .005 (.13 mm) on three place decimals and $\pm 2^\circ$ on angles.
4. These connectors mate with connectors specified in MIL-C-55302/7, and are primarily for use with multilayered printed wiring boards.
5. Positional tolerances of guide pins shall apply at datum plane X.
6. Pad(s) suitable for printed circuit board support are required. Dimensions and location(s) are optional.

FIGURE 1. Connector, receptacle (.100 spacing) - Continued.

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1.

Material:

Guide sockets and guide bushing: Brass composition B, 60,000 to 70,000 PSI tensile, as specified in QQ-W-321, or FC brass as specified in QQ-B-626.

(A)

Plating:

Guide sockets and guide bushings: Gold over copper, type II, class 1, grade C, as specified in MIL-G-45204.

Contact: Gold per MIL-G-45204, type II, grade C, Class 1, over nickel plating per QQ-N-290, Class 2, 50 to 150 microinches.

Contact identification: Shall be numerical and sequential in the pattern indicated.

Socket size: 23

Wire size: 22

Current rating: 5 amperes, maximum.

Oversize pin exclusion: Not applicable.

Mating and unmating: The maximum insertion force, in pounds shall not exceed a value equal to .5 times the number of contacts.

Contact engagement and separation force: The individual contact withdrawal force shall be .5 ounce minimum when tested with a minimum diameter test pin per MS3197-23X1.

Contact resistance: The average resistance of all contact pairs measured shall not exceed .010 ohm, and no individual contact pair shall have a resistance exceeding .020 ohm.

Probe damage: MIL-STD-1344, method 2006.

Contact size: #23

Test probe: .027 diameter.

Bending moment: .125 inch pounds.

Depth of insertion: 5/32 from connector face.

Dielectric withstanding voltage:

Sea level: 1,000 volts rms, 60 Hz, ac.

High altitude: 500 volts rms, 60 Hz, ac.

Part number: M55302/111- (dash number from figure 1).

Custodians:

Army - CR

Navy - EC

Air Force - 17

Preparing activity:

Army - CR

Agent:

DLA - ES

Review Activities:

Army - MI,

Navy - AS

Air Force - 11, 85, 99

DLA - ES

(Project 5935-3095-12)

User activities:

Army - AT, AV,

Navy - MC, OS, SH

Air Force - 19